

IN THE CLAIMS:

Please cancel claims 1-18 and add the following new claims 19-37.

R1.126 ²⁰19. (New) A vaccine or medical preparation comprising a protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2) and/or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof for the treatment of microbial infections.

²¹20. (New) The vaccine or medical preparation according to claim ²⁰~~19~~ for the treatment of *S. pneumoniae*.

B8 ²³21. (New) The vaccine or medical preparation according to claim ²⁰~~19~~, further comprising a suitable adjuvant or carrier.

²³22. (New) The vaccine or medical preparation according to claim ²⁰~~19~~ wherein said protein is the protein maturation protein from *S. pneumoniae* Ft231 or EF3296.

²⁴23. (New) The vaccine or medical preparation according to claim ²⁰~~19~~ wherein said fragment comprises an anchoring fragment, an antigenic fragment or a functional equivalent thereof or a functional equivalent of a receptor binding site or an antibody binding site.

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~~24~~. (New) The vaccine or medical preparation according to claim ~~20~~²⁰ wherein said protein or said fragment comprises a purified, recombinant or synthetic protein or fragment thereof.

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~~25~~. (New) The vaccine or medical preparation according to claim ~~20~~²⁰ wherein said fragment comprises at least 8 amino acids.

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~~26~~. (New) Method for preparation of a vaccine against *S. pneumoniae* comprising the steps of:

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a. isolating a protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or a fragment thereof or a recombinant or synthetic protein or fragment thereof or homologous or functionally homologous protein or fragment thereof; and

b. combining the protein or the fragment thereof obtained under (a) with a suitable carrier or adjuvant.

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~~27~~. (New) Method for obtaining an antibody against the protease maturation protein of *S. pneumoniae*, the method comprising the steps of isolating protease maturation protein comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2) or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof, and raising antibodies against said protein or fragment thereof.

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~~28~~. (New) Antibody comprising opsonophagocytic activity obtainable by the method according to claim ~~27~~.

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~~29~~. (New) Use of a protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof, for the preparation of a vaccine for the treatment or prophylaxis of a *S. pneumoniae* infection.

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~~30~~. (New) Use of a protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or a fragment thereof or a recombinant or synthetic protein or fragment thereof as a carrier.

³²
~~31~~. (New) Method of treatment of a *S. pneumoniae* infection comprising administering a vaccine according to claim ~~30~~.

³³
~~32~~. (New) Method for the vaccination of a mammal against an infection of *S. pneumoniae* comprising administering a suitable dose of a vaccine according to claim ~~31~~.

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~~33~~. (New) Use of a nucleic acid sequence coding for a protease maturation protein comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or a fragment thereof and/or a homologous and/or functionally homologous protein or protein

fragment thereof, for obtaining a recombinant protease maturation protein or fragment thereof.

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(New) Cell containing a recombinant nucleic acid sequence or a vector encoding for protease maturation protein comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof.

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(New) Recombinant protease maturation protein comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), or fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof, obtainable through the expression of a gene sequence encoding for said protein in a suitable vector.

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(New) Use of a protease maturation protein of *S. pneumoniae* comprising an amino acid sequence shown in fig. 1B (SEQ. ID. NO: 2), and/or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof for the preparation of a medicament for the treatment of diseases connected with *S. pneumoniae* infections.

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(New) Use of protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as shown in fig. 1B (SEQ. ID. NO: 2), and/or a fragment thereof and/or a homologous and/or a functionally homologous protein or protein fragment thereof for